# CLAIMS

1. A data area managing method for an information recording medium, the method is used in an information processor that manages data stored in an information recording area in the information recording medium as a file, wherein

when said information processor accesses to area management information that manages a free area state and link state of the information recording area in said information recording medium,

access size is changed according to processing content in said information processor.

2. The data area managing method according to claim 1, wherein

a processing content in said information processor comprises:

a free area retrieval processing for retrieving an free area from said area management information; and

a link destination acquisition processing for acquiring a destination to be linked from said area management information.

3. The data area managing method according to claim

2, wherein

as the access size to said area management information,

when the processing content in said information processor is said free area retrieval processing, a first access size determined from physical characteristics of said information recording medium or a size less than the size is used, and

when the processing content in said information processor is said link destination acquisition processing, a second access size that is a minimum access unit of said information recording medium is used.

4. The data area managing method according to claim 3, wherein

as the access size to said area management information in said free area retrieval processing,

when access to a location other than a head or end of said area management information is performed, a physical management block size determined from physical characteristics of said information recording medium is used, and

when access to the head or end of said area management information is performed, a size equal to or less than said physical management block size is used.

5. The data area managing method according to claim 4, wherein

as the access size in accessing to the head or end of said area management information is performed, the access size is a size of said area management information in the physical management block determined from physical characteristics of said information recording medium is used.

6. The data area managing method according to claim 1, wherein two caches each having a different management block size are provided as area management information caches in said information processor, and by using said two caches for each different purposes, said access size is changed according to the processing content in said information processor.

7. The data area managing method according to claim 6, wherein

a processing content in said information processor comprises:

a free area retrieval processing for retrieving an free area from said area management information; and

a link destination acquisition processing for

acquiring a destination to be linked from said area management information.

8. The data area managing method according to claim 7, wherein

as an alternative use of said two area management information caches,

when the processing content in said information processor is said free area retrieval processing, a physical management block size determined from physical characteristics of said information recording medium or a first area management information cache having a size less than the size is used, and

when the processing content in said information processor is said link destination acquisition processing, a second area management information cache as minimum access unit of said information recording medium is used.

9. The data area managing method according to claim 8, wherein

as the access size to said area management information which uses said first area management information cache,

when access to a location other than a head or end of said area management information is performed, a physical

management block size determined from physical characteristics of said information recording medium is used, and

when access to the head or end of said area management information is performed, a size equal to or less than said physical management block size is used.

10. The data area managing method according to claim 9, wherein

when access to the head or end of the area management information is performed, using said first area management information cache,

the access size is a size of said area management information in the physical management block determined from physical characteristics of said information recording medium.

11. The data area managing method according to claim 8, wherein

said second area management information cache is used only for an exclusive processing of reading, and

said first area management information cache is used when the information stored in said area management information is changed.

12. An information processor which accesses to an information recording medium managing data stored in an information recording area by a file system comprising:

a FAT cache for reading and storing area management information which manages a free state and link state of said information recording area from said information recording medium;

a volatile memory for holding, data including a start address of each block, location of the area management information stored in each block on said information recording medium, size of each block, and presence or absence of update, as FAT cache management information for managing said FAT cache by dividing said FAT cache into a plurality of blocks;

a FAT cache controller for referring to and updating said FAT cache management information and controlling a read and change of said area management information to said FAT cache; and

a file system controller for accessing to the area management information through said FAT cache controller and storing data in the information recording medium as a file.

13. The information processor according to claim 12, wherein

said FAT cache has each of one or more blocks of two types of blocks of a block having the first access size and a block having the second access size, said first access size is a physical management block size determined from physical characteristics of said information recording medium and said second access size is minimum access unit of said information recording medium.

14. The information processor according to claim 13, wherein

said FAT cache controller reads data from the information recording medium and holds them to a block having the size of the first access size, a size of the data is the physical management block size determined from physical characteristics of said information recording medium, when holding the area management information stored in a location of other than a head or end of said area management information, and

said FAT cache controller reads data from the information recording medium and holds them, the size of the data is equal to or less than said physical management block size, when holding the area management information stored in a location of the head or end of said area management information.

15. The information processor according to claim 13, wherein

said file system controller accesses to:

a block having the first access size included in said FAT cache through said FAT cache controller when free area retrieval processing for retrieving an free area from said area management information, and

a block having the second access size included in said FAT cache through said FAT cache controller when a link destination acquisition processing for acquiring a destination to be linked from said area management information.